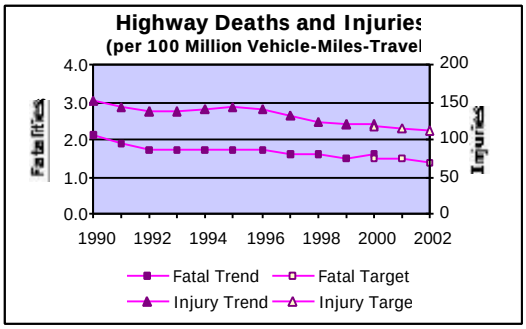
MAJOR PROGRAM PERFORMANCE

SURFACE

In surface transportation program performance, the Department was successful in reducing rail fatalities, pipeline failures and pipeline hazardous material spills. DOT also made significant improvements in highway pavement conditions due to the Transportation Equity Act for the 21st Century (TEA-21) funding for pavement preservation and rehabilitation.

SAFETY

HIGHWAY FATALITY AND INJURY RATE



Performance Measure: Number of fatalities per 100 million vehicle-miles-traveled (VMT).

2002 Goal: 1.4

2001 Goal: 1.5

2000 Goal: 1.5

2000 Performance: 1.6#
Preliminary estimate

Performance Measure: Number of injured persons per 100 million vehicle-miles-traveled (VMT).

2002 Goal: 111

2001 Goal: 113

2000 Goal: 116

2000 Performance: 119#
Preliminary Estimate

In 2000, motor vehicle crashes killed an estimated 41,800 Americans and injured over 3.2 million others, taking a heavy toll on American families and costing more than $150 billion in medical and other costs. Highway crashes cause 94 percent of all transportation-related fatalities and 99 percent of transportation injuries. They are the leading cause of death for people ages 5 through 29.

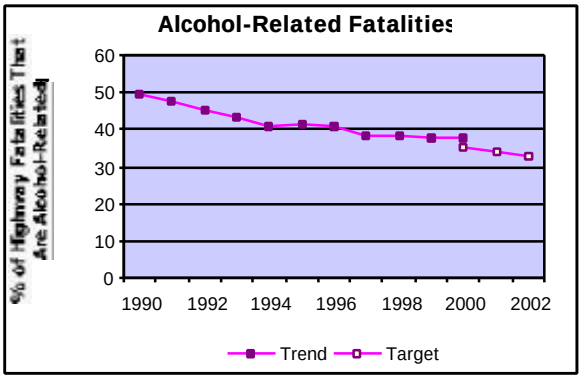
Fluctuations in VMT, as happened in 2000 when VMT did not grow, will affect fatality and injury rates. In addition, the highest risk population groups — older drivers and drivers ages 15 to 24 — are growing at faster rates than the overall population. The number of younger drivers age 15 to 24 grew by

1.6 percent in 2000, nearly twice as fast as the total population. People in this age group accounted for an estimated 25 percent of 2000 traffic fatalities. Although the number of people 70 years and older makes up 9 percent of the total U.S. resident population, they comprised an estimated 12 percent of all traffic fatalities in 2000.

Management Challenge – Motor Vehicle Safety (IG)

The Inspector General (IG) made three findings related to motor vehicle safety: (1) Despite the combined efforts of Federal, State, and local governments, seat belt use rates have remained relatively constant, ranging from 66 to 70 percent since 1993. Preliminary 2000 seat belt use rates are at 71 percent nationwide, below the national goals of 85 percent for 2000 and 90 percent for 2005; (2) Early identification of defects by NHTSA's Office of Defects Investigation (ODI) can be improved. During the hearings on the Firestone tire recall, Congress questioned the preparedness of ODI to handle information that may contain early warning signs of product defects; and (3) The Transportation Recall Enhancement, Accountability, and Documentation (TREAD) Act requires NHTSA to conduct 10 rulemakings in the areas of defects, tires, and rollover tests. Six of the 10 rulemakings must be completed in 2001 or 2002. Since the IG found that it takes DOT an average of 3.8 years to complete a rule, significant management effort will be required to issue these rules in the time frame required by the Act.

ALCOHOL-RELATED HIGHWAY FATALITIES



Performance Measure: Percentage of highway fatalities that are alcohol-related.

2002 Goal: 33

2001 Goal: 34

2000 Goal: 35

2000 Performance: 38#
Preliminary Estimate

About 3 in every 10 Americans will be in an alcohol-related crash at some time in their lives. Alcohol-related fatalities account for almost 40 percent of all highway fatalities. While down from 25,000 in 1982, an estimated 16,068 people died in alcohol-related motor vehicle crashes in 2000. Alcohol is the single biggest contributing factor to fatal crashes. The Department's goal is to reduce alcohol-related fatalities to no more than 11,000 by 2005.

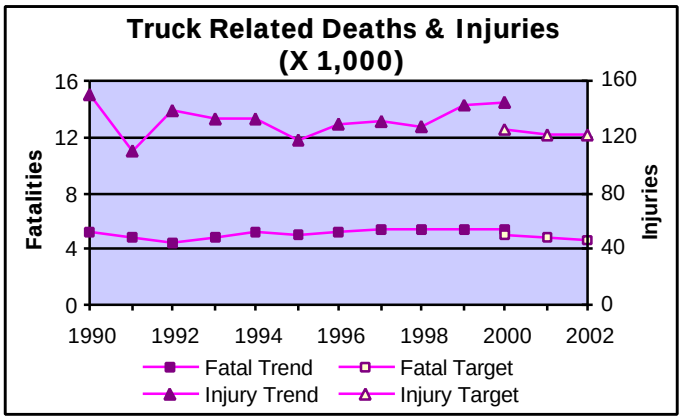
Based on a preliminary estimate, it appears that DOT did not meet the target. While the number of alcohol-related fatalities has decreased 32 percent since 1988, alcohol-related fatalities as a percentage of total

fatalities have stayed constant since last year. Alcohol consumption among 16 to 20 year olds has increased every year since 1993. The percentage of alcohol-related fatalities associated with this group increased slightly from last year (24 percent in 2000 vs. 21 percent in 1999).

DOT worked with other Federal agencies, States, and non-governmental organizations in influencing the number of alcohol-related fatalities. All States plus the District of Columbia (DC) now have zero tolerance laws prohibiting any level of alcohol in the blood of a driver who is under 21. Both Maine and Oregon, for example, have enacted zero tolerance laws. In Maine, where the blood alcohol concentration (BAC) level was reduced from .02 to .00 BAC, there was a 36 percent reduction in nighttime, single vehicle injury (NSVI) crashes involving drivers under age 21. In Oregon, where the .00 BAC limit was changed to include not only those 18 and under, but all those 21 and under, there was a 40 percent reduction in NSVI.

TEA-21 authorized $500 million over 6 years for incentive grants to States that enact and enforce laws that make it illegal to operate a motor vehicle with BAC of .08 percent or greater. TEA-21 also authorized $219.5 million over 6 years to continue the Section 410 alcohol-impaired driving countermeasures incentive grant program. To qualify for this grant, States must either demonstrate that they have in place certain laws or programs, such as administrative license revocation laws and graduated licensing programs, or meet certain performance criteria based on their alcohol-related fatality rates. States use Section 410 grant funds to implement and enforce alcohol-impaired driving countermeasures.

LARGE TRUCK-RELATED FATALITIES AND INJURIES



Performance Measure: Number (000s) of fatalities in crashes involving large trucks.

2002 Goal: 4,710

2001 Goal: 4,830

2000 Goal: 4.934

2000 Performance: 5,307#
Preliminary Estimate

Performance Measure: Number (000s) of injured persons in crashes involving large trucks

2002 Goal: 121

2001 Goal: 122

2000 Goal: 125

2000 Performance: 145#
Preliminary Estimate

In 2000, an estimated 5,307 Americans died and an estimated 145,000 were injured in traffic crashes involving large trucks — about 13 percent of all people killed in motor vehicle incidents. Yet trucks represent only 4 percent of registered vehicles and about 7 percent of the vehicle-miles of travel. Fatality and injury rates for large truck crashes dropped 28 and 30 percent, respectively, from 1990 to 2000, even as the population of motor carriers doubled and commercial vehicle travel mileage increased 38 percent during the last decade.

More commercial vehicles and motor carriers are being registered, and traffic volume, including truck and bus travel, is increasing. Business conditions and the amount of experience of commercial truck drivers may affect efforts to improve safety management practices and reduce large truck crashes. Competitive pressures are likely to persist due to the real-time visibility of freight shipments, just-in-time delivery requirements of customers, and shifting patterns in truckload volume and travel.

Based on preliminary data, DOT did not reach its performance targets; however, the slight reduction in fatalities shows progress toward meeting our goal. Preliminary estimates do not show a statistically significant change in the number of injured persons from last year, so substantial progress still needs to be made. Crash causation data analysis efforts will continue as part of DOT's overall strategy to develop countermeasures aimed at reducing the number of injuries and fatalities resulting from large truck crashes.

Management Challenge — Large Truck Safety (IG/GAO)

The IG stated in early 1999 that improvements in motor carrier safety should include efforts to: strengthen enforcement; improve the quality and timeliness of data; identify unsafe motor carriers; improve crash data analysis; and standardize data collection procedures.

GAO's concerns extend to staffing in FMCSA; truck safety data quality and causal analysis; adequacy of FMCSA's resources; and safety rulemaking.

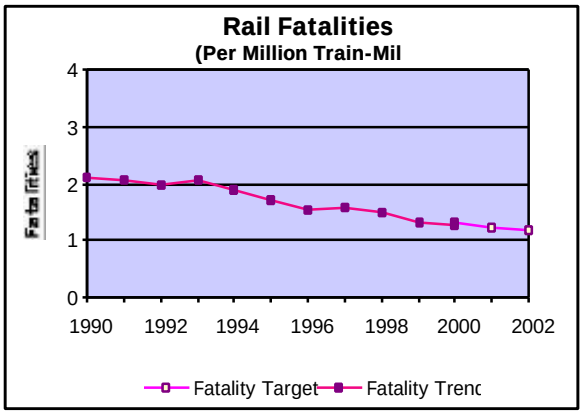
In FY 2000, FMCSA addressed these challenges by:

- Increasing the number of compliance reviews by 68 percent and the number of enforcement cases the agency handled by 39 percent, when compared to FY 1999.
- Completing a Final Rule with stronger enforcement provisions against motor carriers, brokers, and freight forwarders for failure to pay safety fines.
- Completing a Final Rule to shutdown motor carriers that are unfit and fail to correct safety deficiencies.
- Adding six additional States to the Performance Registration and Information System Management (PRISM) program, raising the total number to 18.
- Increasing the number of States involved in Commercial Vehicle Information Systems and Networks

(CVISN) deployment from 10 in 1999 to 30 in 2000.

- Initiating a crash causation study with NHTSA..

RAIL FATALITY RATE



Performance Measure: Rail-related fatalities per million train-miles.

2002 Goal: 1.20

2001 Goal: 1.23

2000 Goal: 1.30

2000 Performance: 1.29#
Preliminary Estimate

In 2000 there were 928 deaths attributable to rail operations. Approximately 50 percent of the fatalities were trespasser-related, and more than 40 percent occurred at highway-rail grade crossings. Employee casualties dropped 5 percent for the year. To reduce rail fatalities, FRA is forging safety partnerships with the rail industry, strengthening educational outreach, and rigorously emphasizing compliance with safety standards.

Trespasser-related deaths occur on private property, with approximately 77 percent of them taking place on the five largest railroads. Additionally, railroad train-miles have grown continuously each year since 1991. Human factors, such as employee fatigue, play a role in determining whether the rail environment is a safe one. All three factors indirectly affect the fatality rate.

Preliminary data reveals that DOT met the target for rail-related fatalities, but missed the accident target.

Although the number of deaths was slightly lower in 2000 vs. 1999 (928 vs. 932), the number of annual train-miles increased, almost 1.2 percent. This means that fewer people died in the rail environment per mile since FRA began collecting data.

FRA conducted outreach programs to various audiences, with special emphasis on the motor carrier, law enforcement, and judicial communities. The primary focus of trespassing prevention efforts was the conduct of public education and awareness programs. FRA also worked closely with Operation Lifesaver, Inc., to develop new print, audio, and video public-service announcements for mass media distribution. Under FRA's Safety Assurance and Compliance Program (SACP), staff worked with the major railroads to identify and solve some of the root causes of systemic problems facing the railroads. Additionally, teams comprised of industry and labor representatives were formed to conduct detailed analyses of each rail employee fatality, resulting in

The Switching Operations Fatality Analysis (SOFA).

FRA took important steps to improve the rail accident rate. Recognizing that a significant number of accidents occurred in rail yards and during switching operations, FRA formed a task force with representatives from rail labor and management to analyze the causes of these accidents and to develop common sense, effective solutions. It is still too early to determine the long-term effectiveness of this program, given that preliminary data show a small increase in yard accidents.

Management Challenge – Rail Safety (IG)

I. According to the IG, a significant safety need shared by Amtrak and the commuter railroads serving Penn Station-New York is the $898 million fire and life safety program necessary to bring the rail tunnels up to acceptable standards. For example, several of the current evacuation routes include narrow 10-flight spiral staircases that simultaneously serve as entranceways for emergency workers.

Amtrak, the Long Island Railroad and New Jersey Transit have developed a revised spending plan and timeline to reflect an accelerated schedule to complete life-safety improvements in the tunnels by 2010. However, this schedule is dependent on significantly higher annual investments by the railroads.

DOT will work with Amtrak, the Long Island Railroad and New Jersey Transit on an ongoing basis to help ensure that sufficient resources are devoted to this critical safety project.

II. Also related to railroad safety, Representative Oberstar requested the Office of Inspector General to review the full range of safety-related data gathered by the Federal Railroad Administration (FRA). The IG explained that historically, FRA has relied almost entirely on individual inspectors to subjectively select the location and frequency of site inspections, reflecting inspector priorities, personal knowledge, and experience. While site inspections are but one element of FRA's safety inspection strategy, FRA management and inspectors could make greater use of prior inspection data contained in the inspection database for planning purposes, such as selecting inspection sites and coordinating inspections.

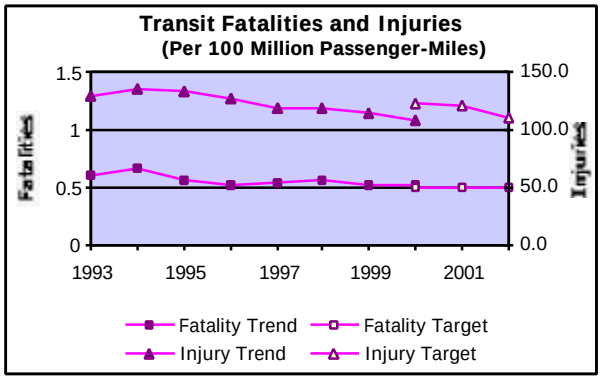
FRA recognizes the IG's concerns regarding the safety inspection strategy and has issued agency guidelines to address this issue. These guidelines set forth specific areas that must be inspected by safety personnel on a regular basis.

III. The IG found positive attributes in FRA's close partnerships with railroads under the Safety Assurance and Compliance Program (SACP) for identifying safety-related deficiencies, but also found shortfalls in follow-up and enforcement of identified safety deficiencies such as widespread track defects. The IG found that after 5 years of experience with the SACP program, it is time to assess its long-term costs and benefits. A reduction in railroad-related fatalities has been achieved, but nationwide train accidents have increased during the past 3 years, and FRA has not met its accident and injuries goals. Specifically, the SACP identified deficiencies in CSX Transportation (CSXT) track but was not effective in ensuring that corrections were made. The rate of CSXT track-related accidents more than

doubled from 1995 to 1999, even though the railroad implemented a Safety Action Plan in 1997. This is particularly problematic because Amtrak uses CSXT track for some of its passenger service.

FRA has addressed these concerns with enforcement actions, an emergency order and a compliance agreement. Enforcement actions resulted in collection of over $4 million in safety fines. FRA has issued an emergency order concerning an unsafe railroad bridge in Oregon, and entered into compliance agreements to resolve long term track safety issues.

TRANSIT FATALITY AND INJURY RATES



Performance Measure: Transit fatalities per 100 million passenger-miles traveled.

2002 Goal: .492

2001 Goal: .497

2000 Goal: .502

2000 Performance: .519

Performance Measure: Transit injured persons per 100 million passenger-miles traveled.

2002 Goal: 109.4

2001 Goal: 120.7

2000 Goal: 121.9

2000 Performance: 107.5

Public transit provides a flexible alternative to automobile and highway travel, offering a higher degree of safety as well. Public expectations for safety are much higher for transit than they are for highway travel. DOT seeks continuous reductions in transit fatalities and injuries.

As the population grows, the use of public transit can also be expected to increase.

Although DOT did not meet the fatality rate target, the fatality rate decreased substantially from last year in the midst of an increase in ridership. DOT met the injury rate target.

Through FTA, the Transportation Safety Institute offered 25 different safety courses at 118 training sessions throughout the United States. The 51,096 student hours completed by 3,083 transit personnel indicate industry acceptance of the program. There were also 190 Bus Operator Training course offerings, consisting of 31,543 student hours completed by 3,945 personnel.

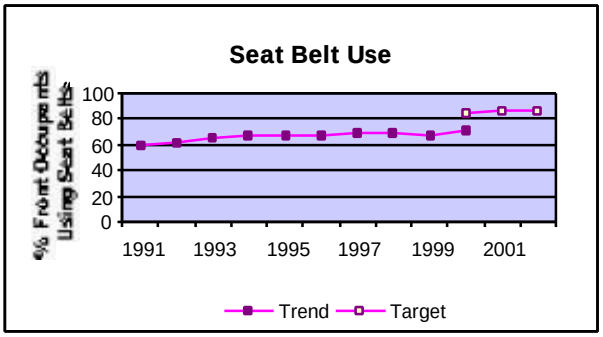
Five State safety oversight audits were performed in Maryland, Louisiana, Massachusetts, New Jersey, and Illinois. The Tri-State Oversight Committee (the oversight agency for the Washington D.C. Metropolitan Area Transit Authority) was also audited.

Since 1996, the percent of positive random drug and alcohol test results have declined by 33 percent and 44 percent, respectively. In light of the drop in positive tests for alcohol, the required alcohol testing rate has been revised to 10 percent; however, the drug random testing rate is being continued at 50 percent.

Twenty-six voluntary security audits were conducted at rail/bus systems throughout the country and 33 security audits were conducted at bus-only systems. The audit program is advisory only. However, most systems have acknowledged the technical expertise of FTA's audit consultants and have adopted the recommendations resulting from the audit.

The major causes of transit fatalities/injuries are being investigated in the Transit Accident Causal Factors Study. Rail transit systems that share tracks with freight railroads pose significant safety issues, since a collision between a rail transit vehicle and a freight train has potentially catastrophic consequences. To heighten awareness of safety issues, FTA and FRA have jointly conducted outreach to grantees and the American Public Transit Association on shared use of the general rail system. Additionally, to ensure better safety awareness, FTA is developing planning guidance for local governments' planning agencies and assisting in negotiations with owner railroads for proposed shared track and shared corridor rail transit projects.

SEAT BELT USE



Performance Measure: Percentage of front occupants using seat belts.

2002 Goal: 87

2001 Goal: 86

2000 Goal: 85

2000 Performance: 71

According to a survey conducted by NHTSA in June 2000, nearly 30 percent of Americans (or about 85 million people) still do not use seat belts when driving or riding in motor vehicles. Seat belts save an estimated 10,000 lives each year. If seat belt use nationwide were to increase to 90 percent, an additional 5,500 deaths and 121,000 injuries could be avoided each year, saving $8.8 billion annually. DOT's goal is to increase seat belt usage to 90 percent by 2005.

Beginning in 1991, and increasingly every year thereafter, DOT and its partners have succeeded in convincing the majority of the population to buckle up. However, the behavior of the remaining part-time seat belt users and non-users will be more difficult to change.

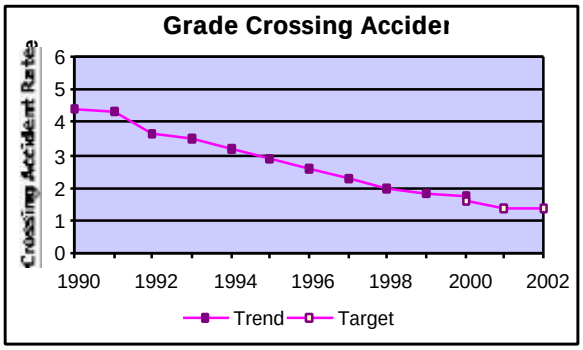
DOT did not meet the performance target, although this year's 71 percent rate is the highest in our Nation's history. The child passenger restraint

rate has also risen dramatically over the past few years as child passenger fatalities continue to decline. In just two years, restraint use for children ages 0-15 years of age has climbed from 65 to 75 percent. The increase in restraint use among toddlers (1-4 years of age) has been even more dramatic: 60 to 87 percent.

In 2000, NHTSA provided information and technical assistance to support the efforts of States and national organizations to strengthen State laws regarding seat belt and child restraint use. By the end of 2000, 17 states plus Puerto Rico, Washington, D.C., American Samoa, Guam, the Marianas, and the Virgin Islands had enacted primary (or standard) belt laws. An additional 32 States have secondary belt laws. New Hampshire has no adult seat belt law. Our analysis of this year's data leads us to the conclusion that overall shoulder belt use in States with standard (primary) seat belt laws was 77 percent compared to 63 percent in States without standard enforcement laws.

In 2000, NHTSA published *The Child Restraint Systems Safety Plan*, which outlined more than 30 new or ongoing agency activities to improve motor vehicle safety for children from infancy through age 10. The plan focuses on two major strategies: encouraging the correct use of safety seats that afford optimal protection and providing useful consumer information on child passenger safety. The plan further proposes that NHTSA add safety seats to vehicles that are crash tested through its New Car Assessment Program (NCAP); develop a 10-year-old child dummy to better evaluate the performance of booster seats designed for larger children; review test procedures for NHTSA's standard on child safety seats; publish a "best practices" guide for organizations planning to establish safety seat fitting stations; and provide additional consumer information on the features and proper use of safety seats.

HIGHWAY-RAIL GRADE CROSSING ACCIDENTS



Performance Measure: Grade crossing accidents divided by the product of million train-miles and trillion vehicle-miles traveled.

2002 Goal: 1.39

2001 Goal: 1.39

2000 Goal: 1.57

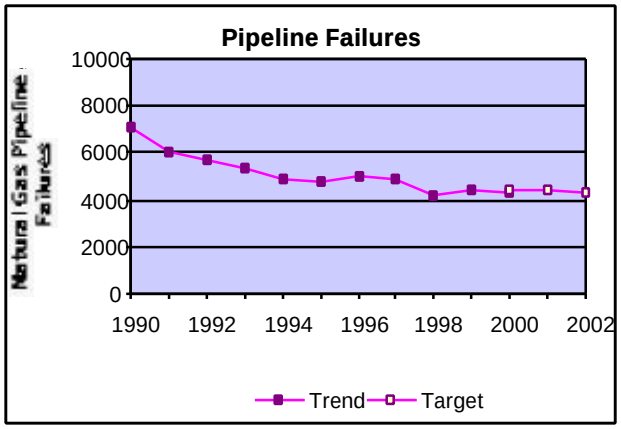
2000 Performance: 1.78#
Preliminary Estimate

In 2000, the rail industry continued its downward trend in the number of grade crossing accidents. There were an estimated 3,441 crossing accidents versus 3,489 in 1999. While this is encouraging news, grade crossing accidents continue to be the second leading cause of rail-related fatalities, exceeded only by trespasser deaths. DOT seeks continual decreases in grade crossing accidents.

U.S. railroad activity has reflected the economic boom of the 1990s, with a rapid expansion in the amount of rail freight and passengers hauled. Since 1990, revenue ton-miles and train-miles have risen almost 40 percent and 20 percent, respectively. Additionally, there are approximately 155,000 public and 99,000 private grade crossings nationwide. These factors increase the risk and likelihood of highway-rail grade crossing accidents.

DOT was slightly higher than the performance target. Although there were fewer grade crossing accidents in 2000 than in 1999, train-miles increased and vehicle-miles traveled (VMT) appeared to have plateaued, affecting the rate. In addition, while "public" crossing accidents have fallen 4 percent from 1999, "private" crossing accidents rose 15 percent. FRA has limited authority or control over the latter.

PIPELINE FAILURES



Performance Measure: Failures of natural gas transmission pipelines.

2002 Goal: 4,301

2001 Goal: 4,375

2000 Goal: 4,451

2000 Performance: 4,322#
Preliminary Estimate

A network of two million miles of pipelines transports natural gas to 60 million residential and commercial customers. While pipelines are among the safest modes for transporting liquids and gases, the nature of the cargo is inherently dangerous. Pipeline failures can pose an immediate threat to people and communities. Corrosion is a leading cause of pipeline failures causing on average 20 percent of all pipeline failures.

Other causes include incorrect operation, construction/material defect, equipment malfunction, failed pipe, and other miscellaneous causes that account for another 41 percent of pipeline failures. DOT seeks to reduce risks to populated areas and to the environment by ensuring that transmission pipeline owners and operators maintain their pipelines in good condition, and operate them well. Long haul transmission pipelines are often in remote locations and underground. Short haul distribution pipelines — typically in neighborhoods — are most susceptible to outside force damage from digging.

Based on preliminary data, DOT met its pipeline safety performance target;

however, we still saw some tragic pipeline failures in 2000. In Carlsbad, New Mexico, a 30-inch natural gas pipeline violently ruptured. The accident resulted in 12 fatalities — the deadliest pipeline accident in the continental United States in almost 25 years.

RSPA has been working closely with the natural gas transmission industry to insure that operators have a staff that is adequately trained and qualified to perform essential maintenance and operational functions, and that operators meet newly established qualification guidelines. RSPA is encouraging industry to monitor corrosion closely, and to inspect pipelines internally where possible for any internal defects or external gouges that may lead to corrosion or pipe seam failure. RSPA is working with industry and the public to provide education about the need for reducing excavation damage hits to pipelines.

RSPA, Battelle Memorial Institute, the Southwest Research Institute, and Iowa State University are working together to determine how in-line inspection technologies may be used for early detection of mechanical damage such as dents, gouges and metal movement, which are precursors to later corrosion failures. The work is progressing and has established that only one survey will be needed to detect corrosion and mechanical damage.

Management Challenge – Pipeline Safety (IG/GAO)

The IG and GAO have made recommendations to RSPA intended to improve pipeline safety. These recommendations included: improve pipeline safety standards, strengthen enforcement of pipeline safety laws and regulations, enhance Federal-State partnerships, provide the public better information and opportunities to participate, and support research and development of innovative pipeline safety technologies. To address these concerns, RSPA will:

1: Finalize actions required by the 1992 and 1996 Congressional mandates:

- RSPA is progressing on finalizing actions required by Congressional mandates. RSPA will complete rulemakings that address all mandates by the close of 2002.

2: Expand the focus of RSPA's research and development programs to include: (a) "smart pigs" that can detect material pipe defects and (b) alternative pipeline inspection and monitoring technologies for pipelines that cannot accommodate "smart pigs".

- In 2001, RSPA is co-funding research on "smart pig" technology to detect excavation- related damage. RSPA is co-funding research on real-time monitoring technologies that detect and prevent construction damage and is funding a study that examines direct assessment of pipelines, including those that cannot be readily pigged. Additionally, RSPA is co-funding airborne leak detection research with the U.S. Air Force. RSPA is also working with the Department of Energy and other stakeholders to develop a nationally coordinated pipeline research plan.

3: Design and implement a program to train Office of Pipeline Safety (OPS) inspectors on the use and capabilities of pipeline inspection technologies and the reading and interpreting of inspection results.

- In 2001, RSPA designed and is conducting a pilot training program for Federal and State inspectors on internal inspection technologies and the analysis of data resulting from internal inspections.
- In 2002, RSPA plans to offer a final version of this training program.

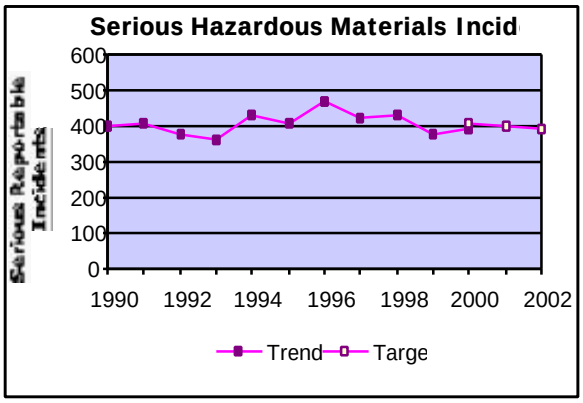
4: Revise collection and processing of pipeline accident data to expand accident causal categories for more detailed trend analysis and to clarify accident form instructions so that operators will be more consistent and accurate in reporting accident causes.

- RSPA proposed reporting changes for natural gas transmission pipeline operators that address this challenge. RSPA expects to finalize proposed changes in 2001.
- In 2001, RSPA expects to finalize a rule that would require hazardous liquid pipeline operators to provide better information on causes of failures. Also in 2001, RSPA plans to propose rules requiring hazardous liquid pipeline operators to file an annual report needed to improve trend analyses.

5: Revise Pipeline Safety regulations to establish an enforcement mechanism to ensure operators submit revised accident reports when required.

- In 2001, RSPA is increasing its oversight of accident reporting by operators and will implement revised procedures to examine accident reports submitted by pipeline operators. OPS is implementing a new "open" and "closed" concept for accident reports that will address erroneous and incomplete report information by keeping accident reports "open" until all information is finalized and complete. New tracking procedures will identify which operators are non-compliant. OPS will pursue enforcement action on operators found to be non-compliant with reporting requirements.

HAZARDOUS MATERIAL INCIDENTS



Performance Measure: Number of serious hazardous incidents in transportation.

2002 Goal: 391

2001 Goal: 401

2000 Goal: 411

2000 Performance: 396#
Preliminary Estimate

Many of the materials used in manufacturing and many of the retail products people buy include hazardous materials. There are over 800,000 shipments of hazardous materials (hazmat) each day in the United States. These range from flammable materials and explosives to poisons and corrosives. Release of these materials

during transportation could result in serious injury or death, or harm to the environment. DOT seeks to reduce public safety risks by minimizing the possibility of hazmat releases in transportation accidents, or of improper hazmat packaging or shipping becoming the cause of transportation accidents, fatalities, or injuries.

The vast majority of hazmat transportation incidents are caused by human error.

Based upon the preliminary estimate, DOT met its performance target. However, serious hazardous materials incidents increased 5 percent from last year. Highway incidents continue to dominate the overall number of serious hazardous materials incidents, but they decreased from 79 percent of total serious incidents to 73 percent. Serious rail incidents increased from 17 percent to 23 percent of the total.

Industry appears to be increasingly focused on safety improvements through improved packaging and better operational and response procedures. The drop in package failure incidents may partially reflect that effort, and suggests at least one aspect of system risk reduction.

Management Challenge – Intermodal Hazardous Materials Safety (IG)

In March 2000, a Final Report on the Department-wide Hazardous Materials Program Evaluation (HMPE) was presented to the Secretary and Congress. The evaluation found that DOT's hazardous materials program is working reasonably well, but that improvements could be made for cross-modal issues. The report recommended a central focal point to administer and deliver a DOT-wide hazardous materials program. The report also made recommendations concerning program delivery issues and data needs, and listed six areas for further analysis.

Based on the findings of the HMPE, the Secretary established the Director, Intermodal Hazardous Materials Program (IHMP) within the Associate Deputy Secretary and Director, Office of Intermodalism. The Director will work with a team comprised of representatives detailed from the five operating administrations involved with hazardous materials safety issues.

The Director for IHMP is responsible for implementing the HMPE recommendations and working with the Bureau of Transportation Statistics to improve data.

This authority was set forth in a Secretarial delegation which authorized the Office of Intermodalism to:

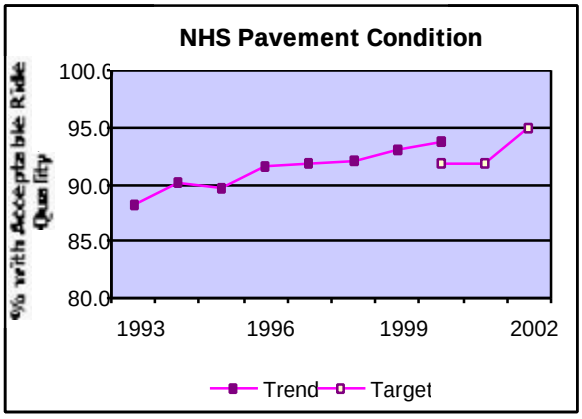
- Be the principal adviser to the Secretary on intermodal and cross-modal issues and the focal point to review hazardous materials policies, priorities, and objectives;
- Provide oversight for planning and budgeting strategies for all DOT hazardous materials activities;
- Resolve disputes among operating administrations of hazardous materials issues;
- Externally review and monitor all DOT hazardous materials activities;
- Coordinate resource issues with the operating administrations and the Assistant Secretary for Budget and Programs;

- Coordinate DOT-wide hazardous materials outreach and data activities; and
- Address other regulatory and programmatic intermodal issues related to hazardous materials.

One of the areas identified by the HMPE for further analysis was the need to develop more effective performance measures for the hazardous materials program. The HMPE found that DOT is hampered by the lack of reliable, timely, and accurate information with which to evaluate program effectiveness and on which to base program delivery decisions. As a result, the Department is unable to gauge its effectiveness or accurately assess its impact on achieving hazardous materials safety or develop better approaches to eliminate the causes of most serious hazardous materials incidents.

MOBILITY

HIGHWAY PAVEMENT CONDITION



Performance Measure: Percentage of miles on the National Highway System (NHS) that meet pavement performance standards for acceptable ride.

2002 Goal: 95

2001 Goal: 91.9

2000 Goal: 91.8

2000 Performance: 93.8#
Projected

The National Highway System (NHS) consists of only 161,117 miles of rural and urban roads — just 4 percent of total highway miles — but carries 1 trillion or 43 percent of vehicle-miles-traveled (VMT). The system serves major population centers, international border crossings, intermodal transportation facilities, and major travel destinations. The condition of this system can affect wear-and-tear on vehicles, fuel consumption, travel time, congestion, and comfort, as well as public safety. Improving the pavement condition is also important to the long-term structural integrity and cost effectiveness of the transportation system. VMT has grown by over 2 percent during the past decade, in consonance with the U.S. economy's growth. Use of heavier and longer trucks has increased pavement deterioration.

DOT estimates that it will again meet its performance target. Due to the significant increase in investment in pavement preservation and rehabilitation from the increased funding made available in TEA-21, and efforts to improve pavement condition, the ride quality of NHS pavements has improved

faster than anticipated. DOT has adjusted the 2002 target upward to account for actual performance in 1999, and expected performance this year.

The focus of this measure of pavement performance is smoothness. Adopting more effective construction and maintenance methods and applying "best practices" in pavement management can improve pavement smoothness. FHWA continued the Pavement Smoothness Initiative, begun last year, to provide information derived from both Research and Development and analysis of "best practices" in pavement construction and management to State DOTs and others involved in the construction and maintenance of highways.

FHWA is also promoting pavement preservation nationwide. This initiative will result in improved pavement smoothness, extended pavement life, and reduced life cycle cost. Model specifications have been developed to assist State Departments of Transportation in improving pavement construction practices. Efforts are underway to promote pavement preservation practices to extend pavement life and improve condition. Work is also underway with the States to improve pavement condition measurement practices and equipment. This effort will increase the reliability of the data used as a basis for decisions on pavement preservation and rehabilitation.

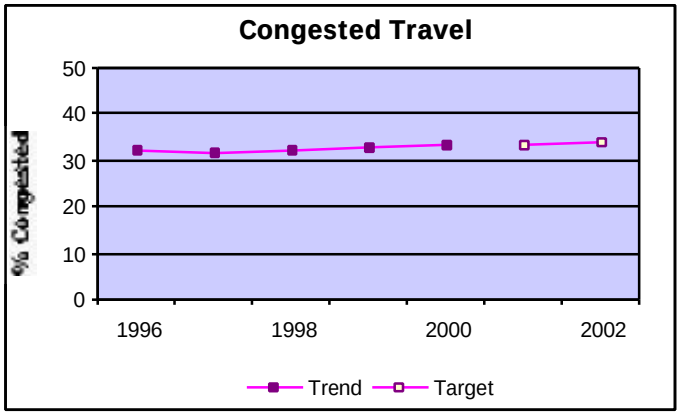
Management Challenge – Highway Trust Fund Receipts/Allocation (GAO)

The June 2000 GAO report stated that there is little assurance that Highway Account funds distributed to the States are accurate given the information currently available. Although the Treasury Department and FHWA are taking actions to review and improve their estimating processes, these actions are not sufficient to correct the weaknesses. Therefore, to reduce the risk of errors and increase the reliability of the information used to distribute Federal highway program funds to the States, GAO made these recommendations to DOT:

- Perform detailed, independent verifications of motor fuel data used in the process.
- Fully document FHWA's current analysis methodology for State motor fuel data.
- Conduct an independent, comprehensive review of this methodology.
- Evaluate the potential reliability of the Internal Revenue Service's ExFIRS data as a tool to validate State motor fuel data.

FHWA officials agreed with all of the recommendations aimed at improving the reliability of FHWA's attribution process, and FHWA has developed an action plan to implement the recommendations. FHWA has also agreed to prepare an annual report to the Congress (with the first report to be issued in July 2001) summarizing its progress in improving reliability of the attribution process whereby Federal highway-user taxes are mapped to their sources in the States.

HIGHWAY CONGESTION



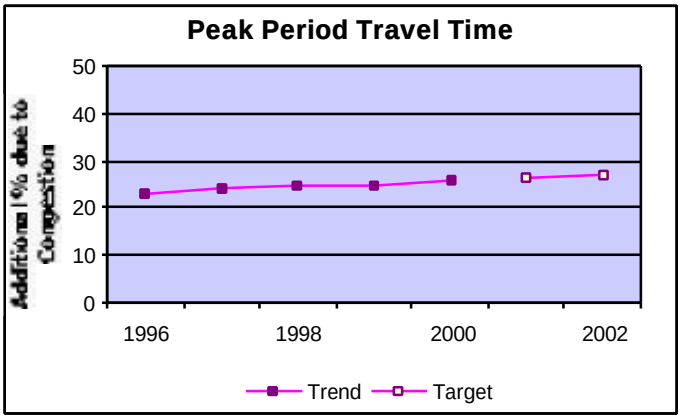
Performance Measure: Of total annual urban-area travel, percentage that occurs in congested conditions.

2002 Goal: 33.7

2001 Goal: 33.4

2000 Goal: N/A

2000 Performance: 33.1#
Projected



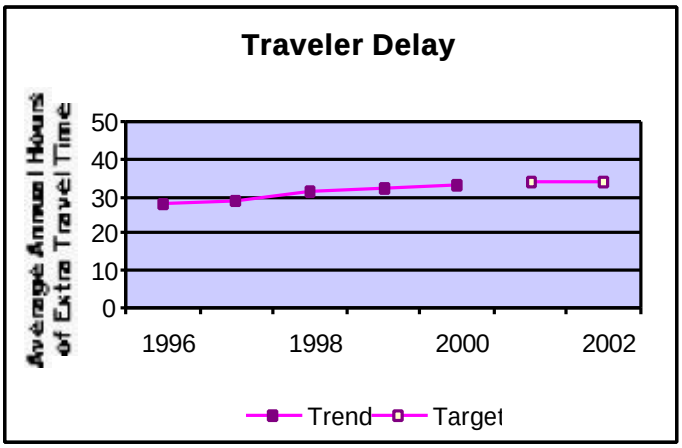
Performance Measure: Of annual urban-area peak period travel time, additional percentage of travel time attributable to congestion.

2002 Goal: 27.2

2001 Goal: 26.6

2000 Goal: N/A

2000 Performance: 26#
Projected



Performance Measure: For the individual traveler in urban areas, average annual hours of extra travel time due to delays.

2002 Goal: 34

2001 Goal: 33.5

2000 Goal: N/A

2000 Performance: 33#
Projected

Congestion is one of the main causes of frustration and unhappiness for users of the highway system. Delay on the Nation's highway systems is a major cost to motorists — amounting to $72 billion in 1997 in lost wages and wasted fuel. It has even more serious consequences for national productivity. Congestion adds to the cost of production, drives prices up, and reduces funds available for investment in product development or firm expansion. Slowing the growth of congestion and delay aids urban travelers' mobility and productivity, and curbs economic inefficiencies induced by congestion.

Lane mileage in metropolitan areas — an indicator of road system capacity — has increased at a far slower rate than has highway travel for the past ten years. As the Nation's cities grow, this travel increase tends to occur at peak periods — the commute to and from work — and increased congestion results.

Actual performance numbers for both the old and new measures are unavailable until September/October 2001. Even so, DOT projects no improvement in the hours of delay per 1,000 VMT between 1999 and 2000. Thus, DOT missed the performance target.

As discussed in DOT's FY 2001 Revised Final Performance Plan, the hours of delay per 1,000 VMT represents only one dimension of delay and does not effectively reflect the actual performance of the highway system in places where congestion regularly happens. Therefore, beginning in 2001 the measure is being replaced by three new interrelated measures: congested travel, peak period travel time, and traveler delay. While no target was set, DOT projects that in 2000, 33.1 percent of daily travel occurred under congested conditions. Because of congested highway conditions, the average peak-period trip took 26 percent (estimated) longer than the same trip would have taken in uncongested conditions. For example, highway congestion added nearly 8 minutes onto a trip that normally would take 30 minutes at the posted speed limit in uncongested conditions. Overall, each individual traveler spent an estimated 33 additional hours on the highway in 2000 because of congested conditions.

The Federal Highway Administration conducted a comprehensive Traveler Perception survey in 2000. The following are key findings regarding highway congestion:

- Sixty-five percent of those surveyed are satisfied with the major highways they travel most often (up 15 percentage points since 1995), while dissatisfaction has increased by 6 percentage points.

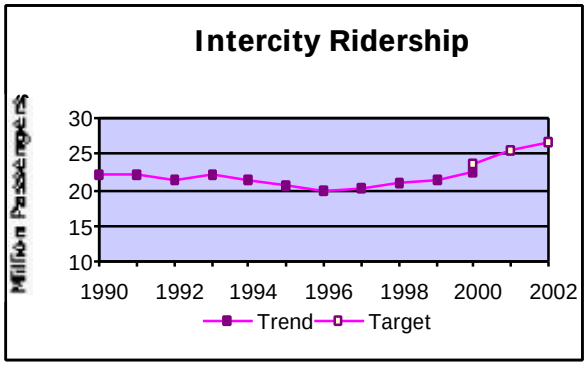
- The public perceives heavy traffic to be the most important reason for travel delays (53 percent). This is twice the number for roadwork and five times the number for either accidents or traffic signals.

- Two in three respondents indicated highway congestion conditions affected their decisions on when to travel and which roads to use. About 20 percent of respondents indicated that traffic affected their decisions about where to work and which hours to work, and 30 percent said it

affected their decision about where they live now.

The public's preferred transportation improvements encourage smarter road management and operation. For example, drivers desire a strategy of "get in, get out, stay out" for both roadwork and clearing accidents. Citizens want us to plan and execute effectively so the work is done correctly and quickly the first time, resulting in less traffic disruption; and to focus on quality improvements and high performing materials to minimize the need for recurring roadwork. FHWA has taken these results into account in its outreach plans for highway operations.

AMTRAK RIDERSHIP



Performance Measure: Intercity ridership (millions of passengers).

2002 Goal: 26.7

2001 Goal: 25.3

2000 Goal: 23.7

2000 Performance: 22.5

Intercity rail passenger service benefits Americans by providing a transportation alternative to air or automobile travel, and thereby helps to reduce congestion, improve air quality, and decrease energy consumption. But such rail service is capital intensive, and Amtrak's operating revenues have not been able to fund all the annual costs necessary to renew its capital infrastructure. Increasing ridership on Amtrak trains is essential for the Corporation's financial viability.

Amtrak is a for-profit corporation. DOT must work to ensure that Amtrak balances the conflicting pressures of generating short-term cash, long-term revenues, and restoring Amtrak's aging infrastructure. Outside of the Northeast Corridor, commercial railroads own both rights-of-way and operating systems. This can create problems in achieving on-time performance (and customer satisfaction) on lines congested by freight trains.

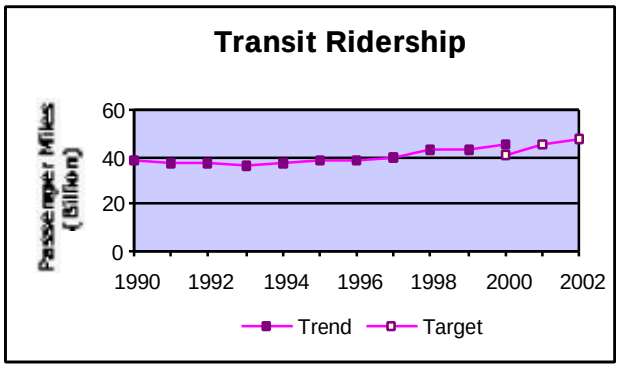
Although the target was not met, ridership levels rose considerably, marking the fourth consecutive year of significant increases for Amtrak. Amtrak ridership rose 4.7 percent above last year, and was at a record high. Furthermore, ridership growth occurred during a year when final delivery of Amtrak's high-speed train, the Acela Express, experienced significant delays. Amtrak placed the Acela Express into revenue service on December 11, 2000.

Amtrak also has experienced growth in passenger revenues. Passenger revenues have increased by close to 30 percent since FY 1996 and surpassed the $1 billion mark in FY 2000 for the third consecutive year. In FY 2000, the

launch of Acela Regional, Amtrak's electric service between Boston and New York, managed to increase ridership by 45 percent and ticket revenues by 77 percent during the eleven months of operation compared to the non-electric service it replaced. Nevertheless, meeting the operating self-sufficiency goal remains a significant challenge, and can only be achieved by continual growth in ridership and revenues.

HUMAN AND NATURAL ENVIRONMENT

TRANSIT RIDERSHIP



Performance Measure:
Passenger-miles traveled (in billions) by transit.

2002 Goal: 47.5

2001 Goal: 44.8

2000 Goal: 40.56

2000 Performance: 45.3

Public transit offers many benefits; it is one of the safest ways of traveling, relieves road congestion, and often mitigates air pollution. To achieve these benefits, people must be encouraged to use public transit.

Communities are spreading farther away from the central cities, and jobs are increasingly located in the suburbs. This creates longer commutes and more scattered travel patterns. Rural areas and small communities are shifting from an agricultural to a service and manufacturing economy, creating a demand for public transportation. As more women enter the labor market, a larger share of workers will need to travel to childcare centers as well as work locations. All these factors will challenge traditional transit systems.

DOT met the performance target. Transit ridership and service levels continue to grow, commensurate with recent capital investments and system improvements. Capital investment levels in recent years have allowed transit operators to maintain transit infrastructure and make modest increases in the amount of transit service provided.

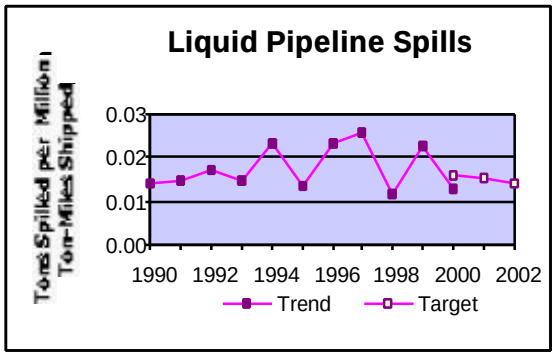
Further growth in ridership is expected as the substantial increases in Federal funding under TEA-21 are translated into new investment. Rail transit ridership growth has been particularly strong, reflecting recent expansions in the Nation's urban rail networks, both through new systems and expansions of established systems. New procurement and refurbishment of transit vehicles has improved the level of service provided on the expanding routes, as

vehicle-miles have increased at a greater rate than route-miles. Transit passenger-mile growth has been stronger still, meaning that, even with the recent expansions in transit route mileage and transit vehicle mileage, transit vehicles are carrying more passengers, thus making better use of the capacity that they have. Annual transit passenger miles now exceed the goals set for 2000 and 2001.

One important factor in the increase in transit travel has been the overall strength of the economy, particularly in central business districts. While most job growth has been in suburban locations, central cities have also seen an increase in employment, and transit is particularly well suited for commuter travel to central business districts. Indeed, transit passenger-mile growth in urban areas in recent years has been on par with, and even exceeded, urban auto passenger travel.

System management improvements such as the introduction of unlimited-ride weekly and monthly passes have been another important factor in improving transit capacity utilization. By reducing the incremental cost associated with a particular transit trip to zero, such passes encourage transit usage for short, discretionary trips (such as for shopping or leisure) that would otherwise be made by taxi or private auto. The combination of a fixed fee and no additional per-ride cost encourages high-volume usage by transit riders, making transit a lifestyle choice rather than simply an occasional convenience and enabling urban residents to limit their auto usage while maintaining an active, productive, mobile lifestyle.

PIPELINE HAZARDOUS MATERIALS SPILLS



Performance Measure: Tons of hazardous liquid materials spilled per million ton-miles shipped by pipelines.

2002 Goal: .0142

2001 Goal: .0151

2000 Goal: .0161

2000 Performance: .0131

More than 617 billion ton-miles of petroleum and other hazardous liquids move across the country by pipeline. While this is usually the least costly way to transport these bulk cargoes, it also entails some risk. Because of the volume of liquid hazardous materials moved by pipelines, any spill into the environment is potentially a significant one. As exemplified by the gasoline pipeline incident in Bellingham, Washington, flammable liquid spills can have potentially catastrophic safety consequences.

Prevention and mitigation of pipeline spills requires improved site-specific knowledge of water and sensitive environmental areas to provide tailored actions to prevent leaks, and, if they do

occur, assure that appropriate and timely response is undertaken.

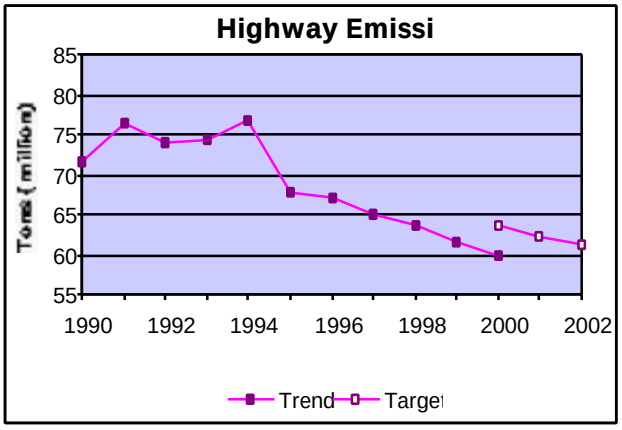
DOT met the performance target. DOT is analyzing the data on hazardous material spills to identify target areas where further improvements might be made. DOT is also improving incident data to make it a more useful tool to identify potential solutions for further reducing pipeline spills.

RSPA continued to work with the American Petroleum Institute (API) to pilot test the new voluntary industry pipeline information system, created with joint industry/State/Federal input and participation. The API voluntary information system will provide data on much smaller spills than captured by the current threshold for Federal spill reporting, providing better trend data, information about precursors to leaks, information about the impacts to the environment, and the effectiveness of remediation efforts.

The Office of Pipeline Safety (OPS) continued to work closely with the Coast Guard and the Environmental Protection Agency in implementing the Oil Pollution Act of 1990 as it applies to onshore oil pipelines. Efforts are aimed at decreasing the likelihood of pipeline spills, diminishing the environmental consequences of spills, and ensuring that the responses to spills are swift and well planned. Operators are required to develop response plans, test their plans in exercises, and implement their plans in actual responses.

RSPA continued to increase public awareness of one-call centers to help reduce excavation damage to pipelines and to identify areas that are unusually sensitive to environmental damage. By identifying where spills would cause the most environmental damage, RSPA is able to target its efforts to improve pipeline structural integrity and maximize the efficient use of available resources.

MOBILE SOURCE EMISSIONS



Performance Measure: Tons (in millions) of mobile source emissions from on-road motor vehicles.

2002 Goal: 61.1

2001 Goal: 62.2

2000 Goal: 63.5

2000 Performance: 59.7#
Projected

Standards target six major pollutants as among the most serious airborne threats to human health. Transportation is a major contributor to some of the pollutants, particularly ozone, carbon monoxide and particulate matter. About two-thirds of transportation-related emissions come from on-road motor vehicles. The quality of our air is a public good, and the cost of these pollutants is not captured in the

marketplace. For this reason, the Government works to mitigate this negative impact.

Growth in the U.S. economy has translated into annual growth in vehicle-miles-traveled (VMT). The principal component — private vehicles — provides flexibility to consumers. So diversion of users to other, more emission-efficient modes must be balanced with market choice and other economic factors.

Data for 2000 are not available. Projections from historical trends indicate that DOT most likely met the performance target. (We expect to receive 2000 data from the Environmental Protection Agency (EPA) by the end of 2001.)

EPA revised the methodology used to define mobile source emissions in 2000 to reflect higher emissions produced by some heavy-duty diesel trucks during high-speed operations. A change in the overall mix toward heavier vehicles could impact the final performance data, when it becomes available.

A high percentage of the non-attainment and maintenance areas showed positive results in 1999. Ninety-eight percent of ozone non-attainment and maintenance areas met their mobile source emissions budgets, as did 96 percent of areas for carbon monoxide and 100 percent of areas for particulate matter (PM-10).

The strong economy supported the steady purchase of new bus, truck, and passenger vehicles with emission-efficient technologies, replacing older, more polluting vehicles. Although there has been a substantial increase in alternative-fuel vehicles since 1992, these accounted for only 400,000 out of the 200 million vehicles on the road in 1998.

Through the Congestion Mitigation and Air Quality Improvement (CMAQ) Program and clean fuels programs, FHWA and FTA provided funding for State and local governments to encourage the use of alternative-fuel vehicles. Since its inception in 1991, CMAQ has provided funding to State and local governments for many other transportation projects, in addition to alternative fuel projects, that provide air quality benefits. While individual projects yield small benefits, taken together CMAQ-funded projects have helped non-attainment areas meet their mobile source emission budget.

A multi-year Public Information Initiative on Transportation and Air Quality, jointly funded by DOT (FHWA and FTA) and EPA, was launched in 1997 to help State and local governments meet their clean air goals under TEA-21 and the Clean Air Act. In 1999, the initiative was expanded to 14 additional communities and came to full fruition in 2000. Areas received Federal support in the form of research, advertising and resource materials, an orientation workshop, and limited funding. Evaluation of these demonstrations is underway. The initiative has generated requests for program materials from 60 communities nationwide interested in local customization and distribution.

FHWA and FTA also assisted in the formation of the Alliance for Clean Air and Transportation, a national alliance of more than 20 public and private

organizations to support an education program to reduce traffic congestion and improve air quality.